

## **REMARKS**

### **Claim Amendments**

For clarity and in a sincere effort to move this case forward, Applicants have in this Response amended independent claims 1, 8, and 15. Claims 1, 8, and 15 as currently amended now recite: “the connection backlog queue comprising one or more connection requests.” As shown below, the references cited in the Office Action do not disclose a connection backlog queue comprising one or more connection requests and as such claims 1, 8, and 15 as currently amended are patentable. Applicants submit that these amendments add no new matter to the present application and place all claims in condition for allowance.

### **Claim Rejections – 35 U.S.C. § 102 Over Firoiu**

Claims 1-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Firoiu, *et al.* (U.S. Patent No. 7,149,664) (hereafter ‘Firoiu’). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As explained in more detail below, Firoiu does not disclose each and every element of claim 1, and Firoiu therefore cannot be said to anticipate the claims of the present application within the meaning of 35 U.S.C. § 102(e).

Independent claim 1 as currently amended recites:

1. A method for dynamically provisioning computer system resources, the method comprising:

monitoring a connection performance parameter of a data communications port operating in a data communications protocol having a connection backlog queue having a connection backlog

queue size, the connection backlog queue comprising one or more connection requests; and

changing the connection backlog queue size in dependence upon the monitored connection performance parameter without interrupting the operation of the data communications port and without user intervention.

**Firoiu Does Not Disclose Monitoring A Connection Performance Parameter Of A Data Communications Port Operating In A Data Communications Protocol Having A Connection Backlog Queue Having A Connection Backlog Queue Size, The Connection Backlog Queue Comprising One Or More Connection Requests**

The Office Action takes the position that Firoiu at column 1, lines 14-15, column 3, lines 53-54, and Figure 13, discloses the first element of claim 1: monitoring a connection performance parameter of a data communications port operating in a data communications protocol having a connection backlog queue having a connection backlog queue size, the connection backlog queue comprising one or more connection requests. Applicants respectfully note in response, however, that what Firoiu at Figure 13 in fact discloses is a block diagram of a congestion control module containing a processor and a queue estimator. In addition, what Firoiu at column 1, lines 14-15, in fact discloses is:

The invention generally relates to networks and, more particularly, the invention relates to the management of a queue at a node in a network.

And what column 3, lines 53-54 in fact discloses is:

For example, in a network employing TCP as the transport layer protocol, the node congestion control module drops acknowledgement packets to indicate congestion and the end-system congestion control module decreases the sending rate in response.

That is, Firoiu at column 1, lines 14-15, and column 3, lines 53-54, discloses a queue at a node in a network where the network employs TCP as the transport layer protocol.

Neither Firoiu's block diagram of a congestion control module containing a processor and

a queue estimator nor Firoiu's queue at a node in a network where the network employs TCP as the transport layer protocol discloses monitoring a connection performance parameter of a data communications port operating in a data communications protocol having a connection backlog queue having a connection backlog queue size, the connection backlog queue comprising one or more connection requests as claimed in the present application. Firoiu's queue does not disclose a connection backlog queue as claimed in the present application. The connection backlog queue as claimed in the present application includes one or more connection requests. Firoiu's queue as described at column 3, lines 37-50, however, contains only flows of data, usually in the form of packets – not connection requests as claimed in the present application. The data flows contained in Firoiu's queue do not disclose connection requests as claimed in the present application because the data flows contained in Firoiu's queue includes only streams of data not a request for a data communications connection between computer systems. In a typical TCP data communications exchange, for example, a connection is established between two network devices using connection requests in the form of a SYN message, a payload of data is transferred between the two devices, and the connection is terminated. Firoiu's data flows are the payload of data transferred between devices not connection requests used to establish a connection between the two devices. Because Firoiu's data flows do not disclose connection requests as claimed in the present application and because Firoiu's queue contains only data flows, not connection requests, Firoiu's queue does not disclose a connection backlog queue as claimed in the present application. Because Firoiu's queue does not disclose a connection backlog queue as claimed in the present application, Firoiu does not disclose monitoring a connection performance parameter of a data communications port operating in a data communications protocol having a connection backlog queue having a connection backlog queue size, the connection backlog queue comprising one or more connection requests as claimed in the present application. Because Firoiu does not disclose each and every element and limitation of Applicants' claims, Firoiu does not anticipate Applicants' claims, and the rejections under 35 U.S.C. § 102(e) should be withdrawn.

**Firoiu Does Not Disclose Changing The Connection Backlog Queue Size In Dependence Upon the Monitored Connection Performance Parameter Without Interrupting The Operation Of The Data Communications Port And Without User Intervention**

The Office Action takes the position that Firoiu at Figure 2, step 210, step 220, and step 230, discloses the second element of claim 1: changing the connection backlog queue size in dependence upon the monitored connection performance parameter without interrupting the operation of the data communications port and without user intervention. Applicants respectfully note in response, however, that what Firoiu at Figure 2, step 210, step 220, and step 230, in fact discloses is a flow chart for determining the steady state operating point of a queue. What Firoiu, at Figure 2, step 210, in fact recites is:

**EVALUATE QUEUE LAW BASED ON TRAFFIC CONDITIONS**

In addition, what Firoiu, at Figure 2, step 220, in fact recites is:

**EVALUATE CONTROL FUNCTION**

And what Firoiu, at Figure 2, step 230, in fact recites is:

**DETERMINE DROP RATE BASED UPON THE INTERSECTION OF THE QUEUE LAW FUNCTION AND THE CONTROL FUNCTION**

That is, Firoiu, at Figure 2, step 210, step 220, and step 230, discloses a method to determine drop rate for a queue. Firoiu's method to determine drop rate for a queue does not disclose changing the connection backlog queue size in dependence upon the monitored connection performance parameter without interrupting the operation of the data communications port and without user intervention as claimed in the present application. Firoiu does not disclose a connection backlog queue as claimed in the present application. A connection backlog queue as claimed in the present application has a connection backlog queue size. Because Firoiu does not disclose a connection backlog queue as claimed in the present application, Firoiu cannot disclose changing the connection backlog queue size of such a connection backlog queue in dependence upon the monitored connection performance parameter without interrupting the operation of the data communications port and without user intervention as claimed in the present

application. Because Firoiu does not disclose each and every element and limitation of Applicants' claims, Firoiu does not anticipate Applicants' claims, and the rejections under 35 U.S.C. § 102(e) should be withdrawn.

### **Relations Among Claims**

Independent claims 8 and 15 are system and computer program product claims for dynamically provisioning computer product resources corresponding to independent method claim 1 that include "means for" and "means, recorded on a recording medium," for dynamically provisioning computer product resources. For the same reasons that Firoiu does not disclose a method for dynamically provisioning computer product resources, Firoiu also does not disclose a system and computer program product for dynamically provisioning computer product resources corresponding to independent claims 8 and 15. Independent claims 8 and 15 are therefore patentable and should be allowed.

Claims 2-7, 9-14, and 16-21 depend respectively from independent claims 1, 8, and 15. Each dependent claim includes all of the limitations of the independent claim from which it depends. Because Firoiu does not disclose each and every element of the independent claims, Firoiu does not disclose each and every element of the dependent claims of the present application. As such, claims 2-7, 9-14, and 16-21 are also patentable and should be allowed.

### **Claim Rejections – 35 U.S.C. § 103 Over Firoiu**

Claims 2, 9, and 16 stand rejected for obviousness under 35 U.S.C. § 103(a) as being unpatentable over the modification of Firoiu. Although Applicants recognize that an obviousness inquiry is an expansive and flexible one, the Office Action must nevertheless demonstrate a *prima facie* case of obviousness to reject Applicants claims under for obviousness under 35 U.S.C. § 103(a). *In re Khan*, 441 F.3d 977, 985-86 (Fed. Cir. 2006). To establish a *prima facie* case of obviousness, the proposed modification must teach or

suggest all of the claim limitations of dependent claims 2, 9, and 16. *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974). Dependent claims 2, 9, and 16 depend respectively from independent claims 1, 8, and 15, and include all the limitations of the independent claims from which they depend. In rejecting dependent claims 2, 9, and 16 the Office Action relies on Firoiu as disclosing each and every element of independent claims 1, 8, and 15. As shown above, Firoiu in fact does not disclose each and every element of independent claims 1, 8, and 15. Because Firoiu does not disclose each and every element of independent claims 1, 8, and 15, the proposed modification of Firoiu cannot disclose each and every element of dependent claims 2, 9, and 16. The proposed modification of Firoiu, therefore, cannot establish a *prima facie* case of obviousness, and the rejections under 35 U.S.C. § 103(a) should be withdrawn.

### **Conclusion**

Claims 1-21 stand rejected under 35 U.S.C. § 102 as being anticipated by the Firoiu patent. Firoiu does not disclose each and every element of Applicants' claims. Firoiu therefore does not anticipate Applicants' claims. Claims 1-21 are therefore patentable and should be allowed. Applicants respectfully request reconsideration of claims 1-21.

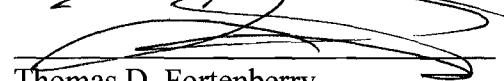
Claims 2, 9, and 16 stand rejected under 35 U.S.C. § 103 as obvious over the modification of Firoiu. The modification of Firoiu does not teach or suggest each and every element of Applicants' claims. Claims 2, 9, and 16 are therefore patentable and should be allowed. Applicants respectfully request reconsideration of claims 2, 9, and 16.

The Commissioner is hereby authorized to charge or credit Deposit Account No. 09-0447 for any fees required or overpaid.

Respectfully submitted,

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